

Docket No. TI- 35230

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Applicant: Colombo et al.  
Application No.: 10/632,230  
Filed: July 31, 2003  
For: HIGH K-GATE DIELECTRIC WITH UNIFORM NITROGEN  
PROFILE AND METHODS FOR MAKING THE SAME

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120:

Serial No.: \_\_\_\_\_  
Filing Date: \_\_\_\_\_

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

- (a) \_\_\_\_ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
- (b) \_\_\_\_ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

- (a) X Within 3 months of the filing date or date of entry into the National Stage.
- (b) \_\_\_\_ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 20-0668 for consideration of this Statement.
- (c) \_\_\_\_ Before the mailing date of a first Office Action on the merits after a first or second submission under 37 C.F.R. 1.129(a).

(d) \_\_\_ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1) \_\_\_ The required certification is given below, or

(2) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or

(3) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 20-0668

(e) \_\_\_ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.

(1) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(i)(1), or

(2) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(i)(1) to Deposit Account No. 20-0668.

4. Certification (if applicable)

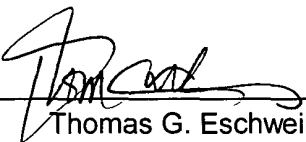
(a) \_\_\_ The undersigned hereby certifies that each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.

(b) \_\_\_ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-0668.

Respectfully Submitted,

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**CERTIFICATE OF MAILING**

I hereby certify that this paper (along with any paper or item referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first-class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: August 21, 2003

  
Christine Gillroy

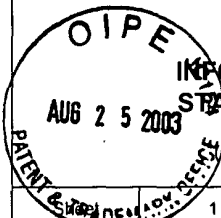
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 Substitute for Form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)		<b>Complete If Known</b>	
		Application Number	10/632,230
		Filing Date	July 31, 2003
		First Named Inventor	Colombo et al.
		Group Art Unit	
		Examiner Name	
1	of	1	Attorney Docket No. TI-35230

U.S. PATENT DOCUMENTS						
Exam. Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	AA	2003/0080389	A1	Hu et al.	05/01/2003	Entire Document
	AB					
	AC					
	AD					
	AF					
	AG					
	AH					

FOREIGN PATENT DOCUMENTS							
Exam. Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)			
	BA						
	BB						
	BF						
	BG						
	BH						

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Exam. Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	"Fabrication of HfSiON Gate Dielectrics by Plasma Oxidation and Nitridation, Optimized for 65nm node Low Power CMOS Applications, SEIJI INUMIYA, KATSUYUKI SEKINE, SHOKO NIWA, AKIO KANEKO, MOTOYUKI SATO, TAKESHI WATANABE, HIRONOBU FUKUI, YOSHIKI KAMATA, MASATO KOYAMA AKIRA NISHIYAMA, MARIKO TAKAYANAGI, KAZUHIRO EGUCHI and YOSHITAKA TSUNASHIMA, 2003 Symposium on VLSI Technology Digest of Technical Papers, June, 2003, 2 pgs.	
	CB		
	CC		
	CD		
	CE		
	CF		
	CG		
	CH		

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**US and Foreign Patent Documents:** <sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

**Other Prior Art/Non-Patent Literature Documents:** <sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.